

**Table A-9. Bachelor's degrees in science and engineering in selected Asian countries, by field: 1975-90**

Page 1 of 3

Year	China	India	Japan	Singapore	South Korea	Taiwan	Total
Social and behavioral science							
1975 . . . .	NA	NA	134,645	NA	NA	2,600	137,245
1976 . . . .	NA	NA	139,258	NA	1,423	2,762	143,443
1977 . . . .	NA	NA	143,416	NA	1,379	2,887	147,682
1978 . . . .	NA	NA	151,519	NA	1,452	2,883	155,854
1979 . . . .	NA	NA	158,023	NA	1,528	2,955	162,506
1980 . . . .	NA	NA	158,394	NA	1,609	2,906	162,909
1981 . . . .	NA	NA	160,520	NA	1,694	2,889	165,103
1982 . . . .	NA	NA	159,450	NA	1,783	3,053	164,286
1983 . . . .	NA	NA	151,996	NA	4,297	3,034	159,327
1984 . . . .	NA	NA	151,626	90	3,297	3,134	158,147
1985 . . . .	NA	NA	151,072	86	6,472	3,265	160,895
1986 . . . .	NA	NA	151,056	91	7,670	3,109	161,926
1987 . . . .	15,685	NA	150,956	106	8,867	3,297	178,911
1988 . . . .	19,306	NA	150,819	106	9,619	3,327	183,177
1989 . . . .	23,762	NA	147,087	102	8,098	3,159	182,208
1990 . . . .	25,305	NA	157,477	117	10,211	3,174	196,284
Natural science							
1975 . . . .	NA	95,382	7,014	466	3,111	1,700	107,673
1976 . . . .	NA	98,038	7,483	490	2,713	1,877	110,601
1977 . . . .	NA	100,768	7,479	335	2,889	1,793	113,264
1978 . . . .	NA	103,574	7,985	347	3,165	1,935	117,006
1979 . . . .	NA	99,724	8,248	528	3,468	1,880	113,848
1980 . . . .	NA	101,455	8,636	573	3,800	1,935	116,399
1981 . . . .	NA	103,217	8,651	460	4,164	1,866	118,357
1982 . . . .	29,127	105,008	8,710	577	4,562	1,945	149,929
1983 . . . .	15,195	106,831	8,575	663	5,202	1,980	138,446
1984 . . . .	15,856	108,686	9,054	726	6,241	1,992	142,555
1985 . . . .	13,106	119,979	9,166	854	8,112	2,091	153,308
1986 . . . .	14,175	122,550	9,435	945	6,913	2,148	156,166
1987 . . . .	14,717	129,907	9,817	1,012	7,082	2,253	164,788
1988 . . . .	15,765	130,000	9,895	982	7,673	2,380	166,695
1989 . . . .	16,888	134,000	9,900	1,166	8,249	2,428	172,631
1990 . . . .	16,570	139,000	9,866	1,278	8,514	2,481	177,709

See explanatory information and SOURCES at end of table.

**Table A-9. Bachelor's degrees in science and engineering in selected Asian countries, by field: 1975–90**

Page 2 of 3

Year	China	India	Japan	Singapore	South Korea	Taiwan	Total
Math and computer sciences							
1975 . . .	NA	NA	2,490	NA	NA	1,200	3,690
1976 . . .	NA	NA	2,529	NA	398	1,336	4,263
1977 . . .	NA	NA	2,755	NA	464	1,287	4,506
1978 . . .	NA	NA	2,703	NA	563	1,230	4,496
1979 . . .	NA	NA	2,829	NA	683	1,345	4,857
1980 . . .	NA	NA	2,918	NA	828	1,422	5,168
1981 . . .	NA	NA	3,152	NA	1,005	1,438	5,595
1982 . . .	14,804	NA	3,045	NA	1,393	1,536	20,778
1983 . . .	9,289	NA	3,148	NA	1,589	1,710	15,736
1984 . . .	4,610	NA	3,180	NA	1,918	1,710	11,418
1985 . . .	7,862	NA	3,532	NA	2,888	1,916	16,198
1986 . . .	8,462	NA	3,379	NA	2,839	2,134	16,814
1987 . . .	9,152	NA	3,572	NA	3,149	2,082	17,955
1988 . . .	10,884	NA	3,493	NA	5,824	2,414	22,615
1989 . . .	12,943	NA	3,395	NA	6,274	2,621	25,233
1990 . . .	12,915	NA	3,554	NA	6,676	2,818	25,963
Engineering							
1975 . . .	NA	14,073	66,512	236	7,155	5,000	92,976
1976 . . .	NA	15,057	68,126	241	7,272	5,142	95,838
1977 . . .	NA	16,110	70,431	290	7,858	5,258	99,947
1978 . . .	NA	17,237	72,466	240	8,919	5,559	104,421
1979 . . .	NA	17,236	75,409	272	10,124	6,315	109,356
1980 . . .	NA	18,100	74,737	288	11,492	6,463	111,080
1981 . . .	NA	19,007	76,370	323	13,044	7,299	116,043
1982 . . .	145,263	19,959	74,774	349	14,806	7,309	262,461
1983 . . .	89,726	20,960	70,824	585	20,636	7,320	210,050
1984 . . .	77,388	22,010	71,640	585	22,190	7,330	201,143
1985 . . .	63,132	21,088	72,560	769	23,539	7,703	188,791
1986 . . .	72,703	24,096	74,516	924	27,612	7,730	207,581
1987 . . .	92,994	27,057	77,077	907	27,600	7,508	233,143
1988 . . .	104,271	27,000	77,503	1,001	26,891	7,994	244,660
1989 . . .	116,915	28,000	77,009	1,105	28,141	8,007	259,177
1990 . . .	112,814	29,000	81,355	1,220	28,071	8,950	261,410

See explanatory information and SOURCES at end of table.

**Table A-9. Bachelor's degrees in science and engineering in selected Asian countries, by field: 1975–90.**

Page 3 of 3

Year	China	India	Japan	Singapore	South Korea	Taiwan	Total
Agricultural sciences							
1975 ...	NA	4,814	9,480	NA	2,546	800	17,640
1976 ...	NA	5,145	9,965	NA	2,680	898	18,689
1977 ...	NA	5,499	10,455	NA	2,822	866	19,642
1978 ...	NA	5,876	10,937	NA	2,971	961	20,745
1979 ...	NA	6,280	12,794	NA	3,128	926	23,128
1980 ...	NA	6,611	11,182	NA	3,293	977	22,063
1981 ...	NA	6,958	11,555	NA	3,837	1,037	23,387
1982 ...	32,911	7,325	11,016	NA	4,493	1,010	56,755
1983 ...	15,817	7,710	10,658	NA	4,603	984	39,773
1984 ...	15,015	8,116	11,189	NA	4,327	959	39,606
1985 ...	15,525	8,257	10,928	NA	4,068	980	39,758
1986 ...	17,136	7,414	10,991	NA	5,483	969	41,993
1987 ...	18,213	7,810	11,266	NA	6,395	1,137	44,821
1988 ...	18,920	7,827	10,584	NA	8,050	1,196	46,577
1989 ...	19,654	7,684	10,252	NA	8,027	1,133	46,750
1990 ...	20,349	7,774	11,733	NA	8,005	1,234	49,095

**NOTES:** Tables on degrees by field, A-9 to A-11, disaggregate fields of science more than table A-8. In degree tables by field, natural science includes only physical; biological; and earth, atmospheric, and oceanographic sciences. Agriculture and math and computer science are separated out. India data are estimated for 1988–90; Singapore data are estimated for 1990.

**SOURCES:** UNESCO, 1975–92, *Statistical Yearbook*, annual series, supplemented by national sources; China: Government of the People's Republic of China, State Education Commission, Department of Planning and Construction, 1990, *Educational Statistics Yearbook of China* (Beijing); India: Government of India, University Grants Commission, 1990, *Annual Report for the Year 1988–89* (New Delhi), and Government of India, Department of Science and Technology, n.d., *Research and Development Statistics, 1990–91* (New Delhi); Japan: Government of Japan, Ministry of Education, Science, and Culture, 1975–90, *Monbusho Survey of Education*, annual series (Tokyo); Singapore: University of Singapore, 1974–89, *Annual Report*, annual series; South Korea: Government of the Republic of Korea, Ministry of Education, 1975–90, *Yearbook of Educational Statistics*, annual series (Seoul); Taiwan: Government of the Republic of China, Ministry of Education, 1975–90, *Educational Statistics of the Republic of China*, annual series (Taipei); United States: National Science Foundation, 1992, *Science and Engineering Degrees: 1966–90, A Source Book*, NSF 92-326 (Washington, DC)

**Table A-10. Advanced degrees (master's and doctoral) in science and engineering in selected Asian countries, by field: 1975–90**

Page 1 of 3

Year	China	India	Japan	Singapore	South Korea	Taiwan	Total
Social and behavioral science							
1975 . . . . .	NA	NA	2,172	NA	NA	NA	2,172
1976 . . . . .	NA	NA	2,164	NA	161	207	2,532
1977 . . . . .	NA	NA	2,045	NA	118	239	2,402
1978 . . . . .	NA	NA	2,122	NA	145	228	2,495
1979 . . . . .	NA	NA	2,092	NA	178	194	2,464
1980 . . . . .	NA	NA	2,103	NA	218	229	2,550
1981 . . . . .	NA	NA	2,125	NA	267	579	2,971
1982 . . . . .	NA	NA	1,967	NA	249	464	2,680
1983 . . . . .	NA	NA	1,935	2	402	372	2,711
1984 . . . . .	NA	NA	2,003	4	527	298	2,832
1985 . . . . .	NA	NA	2,179	11	825	370	3,385
1986 . . . . .	NA	NA	2,175	7	848	372	3,402
1987 . . . . .	1,567	NA	2,282	6	823	430	5,108
1988 . . . . .	1,751	NA	2,421	7	798	452	5,429
1989 . . . . .	1,957	NA	2,560	6	816	286	5,625
1990 . . . . .	1,792	NA	4,981	6	916	277	7,972
Natural science							
1975 . . . . .	NA	18,825	1,599	18	NA	NA	20,442
1976 . . . . .	NA	19,043	1,740	11	220	222	21,236
1977 . . . . .	NA	19,281	1,892	9	230	212	21,624
1978 . . . . .	NA	19,539	1,858	8	285	270	21,960
1979 . . . . .	NA	19,700	1,960	7	352	258	22,277
1980 . . . . .	68	20,369	1,977	6	436	294	23,150
1981 . . . . .	2,141	21,063	1,989	7	539	372	26,111
1982 . . . . .	618	21,781	2,021	2	667	359	25,447
1983 . . . . .	511	22,525	2,087	8	1,099	346	26,575
1984 . . . . .	231	23,295	2,102	11	1,187	333	27,159
1985 . . . . .	2,421	21,922	2,256	11	1,825	370	28,805
1986 . . . . .	1,595	22,877	2,243	13	1,661	421	28,810
1987 . . . . .	4,132	26,401	2,426	31	1,865	475	35,330
1988 . . . . .	4,660	25,074	2,579	46	1,255	566	34,180
1989 . . . . .	5,255	25,110	2,833	46	1,245	586	35,075
1990 . . . . .	5,299	26,500	5,412	50	1,365	748	39,374

See explanatory information and SOURCES at end of table.

**Table A-10. Advanced degrees (master's and doctoral) in science and engineering in selected Asian countries, by field: 1975–90**

Page 2 of 3

Year	China	India	Japan	Singapore	South Korea	Taiwan	Total
Math and computer sciences							
1975 . . . . .	NA	NA	277	NA	NA	NA	277
1976 . . . . .	NA	NA	217	NA	NA	84	301
1977 . . . . .	NA	NA	269	NA	NA	91	360
1978 . . . . .	NA	NA	267	NA	NA	104	371
1979 . . . . .	NA	NA	261	NA	NA	92	353
1980 . . . . .	NA	NA	261	NA	NA	93	354
1981 . . . . .	NA	NA	283	NA	NA	129	412
1982 . . . . .	NA	NA	264	NA	NA	165	429
1983 . . . . .	180	NA	308	NA	NA	164	652
1984 . . . . .	198	NA	337	NA	NA	164	699
1985 . . . . .	1,075	NA	346	NA	NA	188	1,609
1986 . . . . .	941	NA	340	NA	NA	272	1,553
1987 . . . . .	941	NA	392	NA	NA	278	1,611
1988 . . . . .	NA	NA	387	NA	399	307	1,093
1989 . . . . .	NA	NA	440	NA	392	418	1,250
1990 . . . . .	NA	NA	827	NA	596	465	1,888
Engineering							
1975 . . . . .	NA	1,364	6,721	5	NA	NA	8,090
1976 . . . . .	NA	1,563	6,440	42	319	265	8,629
1977 . . . . .	NA	1,794	7,705	45	334	314	10,192
1978 . . . . .	NA	2,062	8,355	49	464	403	11,333
1979 . . . . .	NA	2,086	8,358	53	645	395	11,537
1980 . . . . .	205	2,091	7,879	57	896	485	11,613
1981 . . . . .	3,515	2,095	7,733	64	1,246	528	15,181
1982 . . . . .	793	2,100	8,061	72	1,731	634	13,391
1983 . . . . .	1,348	2,105	8,367	148	2,012	761	14,741
1984 . . . . .	1,011	2,110	8,952	132	2,191	914	15,310
1985 . . . . .	4,971	1,935	9,251	135	2,504	1,151	19,947
1986 . . . . .	5,026	2,675	10,303	155	2,844	1,362	22,365
1987 . . . . .	11,051	3,162	11,137	157	3,037	1,551	30,095
1988 . . . . .	12,850	2,829	11,956	151	3,852	1,868	33,506
1989 . . . . .	14,943	2,933	12,954	132	4,020	2,071	37,053
1990 . . . . .	14,027	3,050	24,910	150	4,014	2,407	48,558

See explanatory information and SOURCES at end of table.

**Table A-10. Advanced degrees (master's and doctoral) in science and engineering in selected Asian countries, by field: 1975–90**

Page 3 of 3

Year	China	India	Japan	Singapore	South Korea	Taiwan	Total
Agricultural sciences							
1975 . . . . .	NA	1,800	1,171	NA	NA	NA	2,971
1976 . . . . .	NA	2,087	1,145	NA	194	142	3,568
1977 . . . . .	NA	2,420	1,339	NA	257	157	4,173
1978 . . . . .	NA	2,806	1,460	NA	442	155	4,863
1979 . . . . .	NA	2,864	1,334	NA	470	140	4,808
1980 . . . . .	NA	2,946	1,315	NA	531	140	4,933
1981 . . . . .	311	3,031	1,318	NA	647	153	5,460
1982 . . . . .	121	3,120	1,258	NA	442	167	5,109
1983 . . . . .	167	3,214	1,362	NA	470	183	5,396
1984 . . . . .	53	3,312	2,139	NA	531	200	6,235
1985 . . . . .	1,026	5,738	2,301	NA	647	204	9,916
1986 . . . . .	788	5,941	2,380	NA	622	252	9,983
1987 . . . . .	1,161	3,659	2,382	NA	619	266	8,087
1988 . . . . .	1,400	5,384	2,563	NA	1,072	304	10,723
1989 . . . . .	1,688	5,739	2,837	NA	1,022	350	11,636
1990 . . . . .	1,461	6,300	5,400	NA	1,095	391	14,647

**NOTES:** India data are estimated for 1988-90; Singapore data are estimated for 1990.

**KEY:** NA = Not available

**SOURCES:** UNESCO, 1975–92, *Statistical Yearbook*, annual series, supplemented by national sources; China: Government of the People's Republic of China, State Education Commission, Department of Planning and Construction, 1990, *Educational Statistics Yearbook of China* (Beijing); India: Government of India, University Grants Commission, 1990, *Annual Report for the Year 1988–89* (New Delhi), and Government of India, Department of Science and Technology, n.d., *Research and Development Statistics, 1990–91* (New Delhi); Japan: Government of Japan, Ministry of Education, Science, and Culture, 1975–90, *Monbusho Survey of Education*, annual series (Tokyo); Singapore: University of Singapore, 1974–89, *Annual Report*, annual series; South Korea: Government of the Republic of Korea, Ministry of Education, 1975–90, *Yearbook of Educational Statistics*, annual series (Seoul); Taiwan: Government of the Republic of China, Ministry of Education, 1975–90, *Educational Statistics of the Republic of China*, annual series (Taipei)

**Table A-11. Doctoral degrees in science and engineering  
in selected Asian countries, by field: 1975–90**

Page 1 of 3

Year	China	India	Japan	South Korea	Taiwan	Total
Social and behavioral science						
1975 . . . .	NA	NA	444	NA	NA	444
1976 . . . .	NA	NA	499	31	7	537
1977 . . . .	NA	NA	451	23	13	487
1978 . . . .	NA	NA	454	23	2	479
1979 . . . .	NA	NA	446	24	6	476
1980 . . . .	NA	NA	464	24	8	496
1981 . . . .	NA	NA	523	25	10	558
1982 . . . .	NA	NA	520	25	13	558
1983 . . . .	NA	NA	459	41	15	515
1984 . . . .	NA	NA	467	39	23	529
1985 . . . .	NA	NA	523	50	16	589
1986 . . . .	NA	NA	490	52	26	568
1987 . . . .	NA	NA	489	102	22	613
1988 . . . .	NA	NA	536	90	22	648
1989 . . . .	62	NA	501	97	41	701
1990 . . . .	114	NA	482	107	43	746
Natural science						
1975 . . . .	NA	1,484	449	NA	NA	1,933
1976 . . . .	NA	1,651	456	29	2	2,138
1977 . . . .	NA	1,837	526	22	4	2,389
1978 . . . .	NA	2,044	462	30	7	2,543
1979 . . . .	NA	2,261	515	41	4	2,821
1980 . . . .	NA	2,385	536	55	6	2,982
1981 . . . .	NA	2,516	555	75	8	3,154
1982 . . . .	NA	2,654	511	102	5	3,272
1983 . . . .	NA	2,800	506	83	8	3,397
1984 . . . .	NA	2,954	460	124	14	3,552
1985 . . . .	NA	2,838	535	212	20	3,605
1986 . . . .	NA	2,840	498	201	22	3,561
1987 . . . .	NA	3,038	522	277	35	3,872
1988 . . . .	NA	3,074	507	207	35	3,823
1989 . . . .	571	3,110	587	192	42	4,502
1990 . . . .	652	3,500	568	170	47	4,937

See explanatory information and SOURCES at end of table.

**Table A-11. Doctoral degrees in science and engineering  
in selected Asian countries, by field: 1975–90**

Page 2 of 3

Year	China	India	Japan	South Korea	Taiwan	Total
Math and computer sciences						
1975 . . . .	NA	NA	45	NA	NA	45
1976 . . . .	NA	NA	29	NA	0	29
1977 . . . .	NA	NA	41	NA	0	41
1978 . . . .	NA	NA	38	NA	0	38
1979 . . . .	NA	NA	40	NA	1	41
1980 . . . .	NA	NA	53	NA	1	54
1981 . . . .	NA	NA	52	NA	1	53
1982 . . . .	NA	NA	58	NA	3	61
1983 . . . .	NA	NA	76	NA	4	80
1984 . . . .	NA	NA	69	NA	2	71
1985 . . . .	NA	NA	75	NA	4	79
1986 . . . .	NA	NA	66	NA	13	79
1987 . . . .	NA	NA	83	NA	14	97
1988 . . . .	NA	NA	82	73	14	169
1989 . . . .	NA	NA	88	105	18	211
1990 . . . .	NA	NA	66	75	24	165
Engineering						
1975 . . . .	NA	136	576	NA	NA	712
1976 . . . .	NA	135	558	20	8	721
1977 . . . .	NA	135	672	14	3	824
1978 . . . .	NA	134	591	20	3	748
1979 . . . .	NA	176	665	29	8	878
1980 . . . .	NA	179	665	42	10	896
1981 . . . .	NA	182	697	60	15	955
1982 . . . .	NA	185	634	87	15	921
1983 . . . .	NA	189	591	97	14	891
1984 . . . .	NA	192	575	120	31	918
1985 . . . .	NA	194	559	197	59	1,009
1986 . . . .	NA	215	599	273	83	1,170
1987 . . . .	NA	225	642	270	98	1,235
1988 . . . .	NA	229	736	346	98	1,409
1989 . . . .	971	233	930	415	120	2,669
1990 . . . .	1,054	250	948	439	165	2,856

See explanatory information and SOURCES at end of table.

**Table A-11. Doctoral degrees in science and engineering  
in selected Asian countries, by field: 1975–90**

Page 3 of 3

Year	China	India	Japan	South Korea	Taiwan	Total
Agricultural sciences						
1975 . . . . .	NA	289	175	NA	NA	464
1976 . . . . .	NA	328	153	48	4	533
1977 . . . . .	NA	372	201	40	4	617
1978 . . . . .	NA	422	243	43	5	713
1979 . . . . .	NA	480	198	45	7	730
1980 . . . . .	NA	517	196	48	5	767
1981 . . . . .	NA	558	254	52	15	878
1982 . . . . .	NA	601	238	55	8	902
1983 . . . . .	NA	648	200	60	17	925
1984 . . . . .	NA	698	214	77	15	1,004
1985 . . . . .	NA	782	223	89	10	1,104
1986 . . . . .	NA	690	208	105	28	1,031
1987 . . . . .	NA	832	223	110	28	1,193
1988 . . . . .	NA	884	262	155	28	1,329
1989 . . . . .	75	939	332	175	36	1,557
1990 . . . . .	120	1,100	303	154	33	1,710

**NOTE:** India data are estimated for 1988–90.

**KEY:** NA = Not available

**SOURCES:** UNESCO, 1975–92, *Statistical Yearbook*, annual series, supplemented by national sources; China: Government of the People's Republic of China, State Education Commission, Department of Planning and Construction, 1990, *Educational Statistics Yearbook of China* (Beijing); India: Government of India, University Grants Commission, 1990, *Annual Report for the Year 1988–89* (New Delhi), and Government of India, Department of Science and Technology, n.d., *Research and Development Statistics, 1990–91* (New Delhi); Japan: Government of Japan, Ministry of Education, Science, and Culture, 1975–90, *Monbusho Survey of Education*, annual series (Tokyo); Singapore: University of Singapore, 1974–89, *Annual Report*, annual series; South Korea: Government of the Republic of Korea, Ministry of Education, 1975–90, *Yearbook of Educational Statistics*, annual series (Seoul); Taiwan: Government of the Republic of China, Ministry of Education, 1975–90, *Educational Statistics of the Republic of China*, annual series (Taipei)

**Table A-12. Ratio of science and engineering degrees to total bachelor's degrees in selected Asian countries and the United States, by field: 1975-90**

Page 1 of 3

Year	China	India	Japan	Singapore	South Korea	Taiwan	United States
Natural science							
1975 . . .	NA	NA	0.06	0.20	NA	NA	0.13
1976 . . .	NA	0.16	.06	.21	0.17	0.14	.13
1977 . . .	NA	.16	.06	.14	.17	.13	.13
1978 . . .	NA	.16	.06	.14	.16	.13	.13
1979 . . .	NA	.17	.06	.19	.16	.13	.13
1980 . . .	NA	.18	.06	.22	.16	.13	.13
1981 . . .	NA	.21	.06	.21	.16	.13	.13
1982 . . .	0.21	.20	.06	.24	.17	.14	.13
1983 . . .	.16	.19	.06	.23	.15	.14	.13
1984 . . .	.17	.19	.06	.19	.14	.13	.13
1985 . . .	.18	.20	.06	.20	.13	.14	.14
1986 . . .	.17	.19	.06	.20	.11	.14	.14
1987 . . .	.17	.20	.06	.20	.11	.14	.13
1988 . . .	.16	.19	.06	.19	.13	.15	.12
1989 . . .	.16	.19	.06	.20	.14	.15	.11
1990 . . .	.17	NA	.06	NA	.14	.15	.10
Engineering							
1975 . . .	NA	NA	0.21	0.10	NA	NA	0.04
1976 . . .	NA	0.02	.21	.10	0.21	0.18	.04
1977 . . .	NA	.02	.21	.12	.21	.18	.04
1978 . . .	NA	.03	.20	.10	.22	.18	.05
1979 . . .	NA	.03	.20	.10	.22	.20	.06
1980 . . .	NA	.03	.20	.11	.23	.19	.06
1981 . . .	NA	.04	.20	.15	.23	.23	.07
1982 . . .	0.40	.04	.20	.15	.24	.22	.07
1983 . . .	.36	.04	.19	.20	.27	.22	.07
1984 . . .	.38	.04	.19	.16	.24	.21	.08
1985 . . .	.31	.03	.19	.18	.20	.22	.08
1986 . . .	.32	.04	.20	.19	.20	.21	.08
1987 . . .	.37	.04	.20	.18	.18	.19	.07
1988 . . .	.37	.04	.20	.19	.17	.21	.07
1989 . . .	.38	.04	.20	.19	.17	.20	.06
1990 . . .	.41	NA	.20	NA	.17	.21	.06

See explanatory information and SOURCES at end of table.

**Table A-12. Ratio of science and engineering degrees to total bachelor's degrees in selected Asian countries and the United States, by field: 1975-90**

Page 2 of 3

Year	China	India	Japan	Singapore	South Korea	Taiwan	United States
Natural science and engineering							
1975 . . .	NA	NA	0.27	0.29	NA	NA	0.17
1976 . . .	NA	0.19	.27	.31	0.38	0.32	.17
1977 . . .	NA	.19	.27	.27	.38	.31	.18
1978 . . .	NA	.19	.26	.24	.38	.32	.18
1979 . . .	NA	.20	.26	.29	.38	.32	.19
1980 . . .	NA	.21	.26	.33	.38	.32	.19
1981 . . .	NA	.25	.26	.36	.39	.36	.19
1982 . . .	0.61	.24	.26	.39	.40	.36	.20
1983 . . .	.51	.23	.25	.43	.41	.35	.20
1984 . . .	.55	.22	.26	.35	.38	.34	.21
1985 . . .	.49	.23	.26	.38	.33	.36	.22
1986 . . .	.49	.23	.26	.39	.31	.35	.21
1987 . . .	.54	.24	.27	.37	.30	.34	.21
1988 . . .	.54	.23	.27	.38	.30	.36	.19
1989 . . .	.54	.23	.27	.39	.30	.35	.18
1990 . . .	.58	NA	.27	NA	.31	.36	.16
Social science							
1975 . . .	NA	NA	0.43	NA	NA	NA	0.18
1976 . . .	NA	NA	.43	NA	0.04	0.10	.17
1977 . . .	NA	NA	.42	NA	.04	.10	.16
1978 . . .	NA	NA	.42	NA	.04	.09	.15
1979 . . .	NA	NA	.42	NA	.03	.09	.15
1980 . . .	NA	NA	.42	NA	.03	.08	.14
1981 . . .	NA	NA	.42	NA	.03	.09	.14
1982 . . .	NA	NA	.42	NA	.03	.09	.14
1983 . . .	NA	NA	.41	NA	.06	.09	.13
1984 . . .	NA	NA	.41	0.02	.04	.09	.13
1985 . . .	NA	NA	.40	.02	.05	.09	.13
1986 . . .	NA	NA	.40	.02	.06	.08	.13
1987 . . .	0.06	NA	.39	.02	.06	.09	.13
1988 . . .	.07	NA	.39	.02	.06	.09	.14
1989 . . .	.08	NA	.39	.02	.05	.08	.14
1990 . . .	.08	NA	.39	NA	.06	.07	.15

See explanatory information and SOURCES at end of table.

**Table A-12. Ratio of science and engineering degrees to total bachelor's degrees in selected Asian countries and the United States, by field: 1975–90**

Page 3 of 3

Year	China	India	Japan	Singapore	South Korea	Taiwan	United States
Science and engineering							
1975 . . .	NA	NA	0.70	0.29	NA	NA	0.34
1976 . . .	NA	0.19	.70	.31	0.42	0.41	.34
1977 . . .	NA	.19	.69	.27	.41	.41	.34
1978 . . .	NA	.19	.69	.24	.41	.41	.33
1979 . . .	NA	.20	.69	.29	.41	.41	.33
1980 . . .	NA	.21	.68	.33	.41	.40	.33
1981 . . .	NA	.25	.67	.36	.42	.45	.33
1982 . . .	0.61	.24	.67	.39	.43	.45	.33
1983 . . .	.51	.23	.66	.43	.47	.44	.33
1984 . . .	.55	.22	.66	.38	.42	.43	.34
1985 . . .	.49	.23	.66	.40	.38	.45	.34
1986 . . .	.49	.23	.66	.41	.37	.44	.34
1987 . . .	.60	.24	.66	.40	.35	.42	.34
1988 . . .	.61	.23	.66	.40	.36	.44	.33
1989 . . .	.62	.23	.66	.41	.35	.42	.32
1990 . . .	.67	NA	.66	NA	.37	.43	.31

**NOTES:** China reports social science degrees from 1987 to 1989. India does not report social science degrees.

**KEY:** NA = Not available

**SOURCE:** Computed, table A-3

**Table A-13. Bachelor's degrees in natural science and engineering as a percentage of 22-year-olds in selected Asian countries and the United States: 1975–90**

Page 1 of 1

Year	China	India	Japan	Singapore	South Korea	Taiwan	United States
1975 . . . .	NA	1.07	4.65	1.40	2.07	NA	4.02
1976 . . . .	NA	1.08	4.94	1.41	2.00	2.59	3.85
1977 . . . .	NA	1.08	5.27	1.17	2.03	2.53	3.72
1978 . . . .	NA	1.09	5.60	1.06	2.13	2.61	3.61
1979 . . . .	NA	1.02	6.09	1.40	2.24	2.76	3.51
1980 . . . .	NA	1.01	6.17	1.45	2.37	2.82	4.10
1981 . . . .	NA	1.01	6.26	1.31	2.67	3.01	4.24
1982 . . . .	1.19	1.01	6.09	1.54	3.03	2.99	4.41
1983 . . . .	0.67	1.02	5.77	2.07	3.82	3.01	4.60
1984 . . . .	.55	1.02	5.85	2.16	4.10	2.99	4.82
1985 . . . .	.47	1.07	5.88	2.65	4.54	3.25	5.04
1986 . . . .	.51	1.08	5.90	3.15	5.02	3.36	5.16
1987 . . . .	.59	1.13	6.00	3.34	5.18	3.40	5.13
1988 . . . .	.63	1.11	5.88	3.56	5.66	3.69	4.90
1989 . . . .	.79	1.12	5.73	4.20	5.91	3.79	4.76
1990 . . . .	.83	1.13	5.96	NA	5.97	4.17	4.52

**NOTES:** Natural science includes physical; biological; earth, atmospheric, and oceanographic; agricultural; and math and computer sciences. National data were reconfigured to include only fields of study corresponding to classification of programs used in surveys of higher education in the United States.

**KEY:** NA = Not available

**SOURCE:** Computed, tables A-3 and A-15

**Table A-14. Total population in selected Asian countries: 1975–2000 (projected)**

[In thousands]

Page 1 of 1

Year	China	India	Japan	Singapore	South Korea	Taiwan	Total
1975 ..	916,395	613,459	111,940	2,263	35,281	16,000	1,695,337
1976 ..	929,010	627,569	112,892	2,292	35,832	16,316	1,723,911
1977 ..	941,800	642,004	113,852	2,322	36,392	16,637	1,753,007
1978 ..	954,765	656,771	114,820	2,352	36,960	16,965	1,782,635
1979 ..	967,909	671,878	115,797	2,383	37,538	17,300	1,812,805
1980 ..	981,234	687,332	116,782	2,414	38,124	17,641	1,843,528
1981 ..	994,235	702,235	117,566	2,474	38,646	17,930	1,873,086
1982 ..	1,007,408	717,460	118,355	2,536	39,175	18,224	1,903,158
1983 ..	1,020,755	733,016	119,149	2,600	39,711	18,523	1,933,754
1984 ..	1,034,280	748,909	119,949	2,664	40,255	18,826	1,964,884
1985 ..	1,047,983	765,147	120,754	2,731	40,806	19,135	1,996,556
1986 ..	1,064,591	781,322	121,302	2,783	41,197	19,365	2,030,561
1987 ..	1,081,463	797,839	121,853	2,837	41,591	19,598	2,065,180
1988 ..	1,098,601	814,705	122,406	2,891	41,989	19,833	2,100,426
1989 ..	1,116,012	831,928	122,961	2,947	42,391	20,072	2,136,310
1990 ..	1,133,698	849,515	123,519	3,003	42,797	20,313	2,172,845
1991 ..	1,150,104	865,020	123,954	3,045	43,180	20,491	2,205,793
1992 ..	1,166,747	880,808	124,391	3,088	43,566	20,670	2,239,269
1993 ..	1,183,631	896,884	124,829	3,131	43,956	20,851	2,273,281
1994 ..	1,200,759	913,253	125,269	3,175	44,349	21,034	2,307,838
1995 ..	1,218,135	929,921	125,710	3,219	44,746	21,218	2,342,949
1996 ..	1,232,857	944,683	126,084	3,249	45,119	21,384	2,373,377
1997 ..	1,247,758	959,680	126,459	3,279	45,495	21,552	2,404,222
1998 ..	1,262,838	974,915	126,835	3,309	45,874	21,720	2,435,492
1999 ..	1,278,101	990,392	127,213	3,339	46,256	21,891	2,467,191
2000 ..	1,293,548	1,006,114	127,591	3,370	46,642	22,062	2,499,327

**SOURCE:** Bos, Edward, My T. Vu, and Ann Levin, 1992, *East Asia and Pacific Region, South Asia Region Population Projections*, 1992–93 edition (Washington, DC: The World Bank, Population and Human Resources Department)

**Table A-15. Twenty- to twenty-four-year-old population in selected Asian countries:  
1975–2010 (projected)**

[In thousands]

Page 1 of 1

Year	China	India	Japan	Singapore	South Korea	Taiwan	Total
1975 . . . .	89,178	52,885	9,189	250	3,089	1,710	156,300
1976 . . . .	88,370	54,634	8,916	259	3,269	1,790	157,238
1977 . . . .	87,569	56,441	8,652	267	3,460	1,816	158,206
1978 . . . .	86,776	58,308	8,395	277	3,663	1,854	159,273
1979 . . . .	85,990	60,237	8,146	286	3,877	1,895	160,430
1980 . . . .	85,211	62,229	7,904	296	4,103	1,917	161,660
1981 . . . .	89,116	63,681	7,959	298	4,133	1,936	167,124
1982 . . . .	93,201	65,167	8,015	300	4,164	1,976	172,823
1983 . . . .	97,472	66,688	8,071	302	4,194	1,994	178,722
1984 . . . .	101,940	68,244	8,127	304	4,225	2,002	184,843
1985 . . . .	106,612	69,837	8,184	306	4,256	1,950	191,145
1986 . . . .	110,434	71,349	8,329	297	4,264	1,931	196,603
1987 . . . .	114,392	72,893	8,477	288	4,272	1,911	202,233
1988 . . . .	118,493	74,470	8,628	279	4,279	1,892	208,042
1989 . . . .	122,740	76,082	8,781	270	4,287	1,874	214,035
1990 . . . .	127,140	77,729	8,937	262	4,295	1,855	220,218
1991 . . . .	126,109	79,529	9,137	260	4,326	1,832	221,193
1992 . . . .	125,086	81,372	9,342	257	4,358	1,809	222,224
1993 . . . .	124,072	83,256	9,551	255	4,390	1,786	223,310
1994 . . . .	123,066	85,185	9,765	252	4,422	1,764	224,454
1995 . . . .	122,068	87,158	9,984	250	4,454	1,742	225,656
1996 . . . .	116,094	87,594	9,664	242	4,334	1,773	219,701
1997 . . . .	110,412	88,033	9,354	234	4,217	1,804	214,054
1998 . . . .	105,008	88,473	9,054	227	4,104	1,836	208,702
1999 . . . .	99,869	88,916	8,763	220	3,993	1,869	203,630
2000 . . . .	94,981	89,361	8,482	213	3,886	1,902	198,825
2001 . . . .	94,112	92,010	8,255	216	3,829	1,928	200,351
2002 . . . .	93,251	94,738	8,035	220	3,773	1,955	201,972
2003 . . . .	92,398	97,546	7,820	224	3,718	1,982	203,688
2004 . . . .	91,553	100,438	7,611	227	3,664	2,009	205,502
2005 . . . .	90,715	103,415	7,408	231	3,610	2,037	207,416
2006 . . . .	95,379	104,983	7,282	238	3,537	1,958	213,378
2007 . . . .	100,284	106,575	7,158	246	3,465	1,883	219,611
2008 . . . .	105,440	108,190	7,036	254	3,395	1,810	226,126
2009 . . . .	110,862	109,831	6,917	262	3,326	1,740	232,938
2010 . . . .	116,562	111,496	6,799	271	3,259	1,673	240,060

**SOURCE:** Bos, Edward, My T. Vu, and Ann Levin, 1992, *East Asia and Pacific Region, South Asia Region Population Projections, 1992–93 edition* (Washington, DC: The World Bank, Population and Human Resources Department)